Checklist
Indoor Floor Safety

Slips and falls are the leading causes of nonfatal injuries in the United States. Educational institutions, like other heavily trafficked facilities, are prime locations for slipping, tripping, and falling.

In fact, at United Educators, slip-and-fall claims account for one-third of all claims involving bodily injury, and approximately 45 percent of all slips and falls on campus that result in claims occur indoors. Although most injuries resulting from slips and falls are relatively minor, such as bruising, serious injuries also occur. As the following examples demonstrate, claims involving these injuries can be costly:

- A college student slipped on water leaking from a fountain in a campus building. A custodian noticed the leak earlier in the day but did not report it because he assumed another maintenance crew would handle it. The student suffered a broken kneecap that required several surgeries and resulted in possibly permanent loss of motion. The college's failure to repair the leak led to a judgment of more than $900,000.

- The mother of a university student slipped and fell on a wet floor in a residence hall room, sustaining serious injuries. The room residents had reported to university officials several times that their air conditioning unit was leaking. The university's failure to perform an adequate, timely repair resulted in a $413,000 judgment.

- A 10-year-old student participating in soccer drills in the gymnasium of an independent school suffered a severe leg fracture after tripping over mats used for the drills. The student underwent extensive surgery and rehabilitation. The matter settled for more than $350,000, a portion of which was designated for a medical trust to fund the child's possible future treatment.

While accidents can be caused by faulty maintenance practices like these, they also frequently result when building users track in dirt or water on their shoes, spill beverages, drop papers or trash, or simply wear down floor surfaces. Many indoor slips and falls could be prevented by following certain basic practices to reduce the risk of accidents, including selecting appropriate flooring material and implementing strategies such as regular inspections and careful attention to maintenance. When an accident nevertheless occurs, conducting and documenting a proper investigation is crucial and can mitigate or even avoid institutional liability.
Choose the Right Flooring Material

When selecting flooring material, the facility’s location and intended use should be considered during consultations with architects about the safest flooring choices for new and renovated buildings. Regardless of the material chosen, flooring surfaces generally provide more slip resistance if they are properly maintained.

- Popular alternatives for indoor flooring include:
  - Concrete and quarry tile: Often chosen for entrances and exits because they provide good slip resistance when wet or dry.
  - Carpet, rubber, and vinyl tile: Used effectively in high traffic, interior areas such as hallways or classrooms.
  - Slip-resistant coverings: Rough tile and carpet with short, dense pile are normally good choices.
  - Decorative flooring: Marble and terrazzo surfaces tend to be slippery and may not be good candidates for high-traffic areas.
  - Wood: Low slip resistance but suitable for some areas.

- The following criteria are important in evaluating materials:
  - Slip resistance: Is surface traction good with most types of shoes? How is traction affected if the surface becomes wet?
  - Maintenance: Is the material easy to clean and repair?
  - Durability: Will the material withstand heavy traffic?

Implement Strategies to Reduce the Risk of Accidents

Specific strategies can minimize the risks of indoor slips and falls. Institutions should consider following these practices as part of their safety routines:

- Develop a slip-and-fall accident prevention strategy: Develop a comprehensive strategy that integrates and facilitates communication between administration personnel (e.g., risk management and insurance officers) and operations personnel (e.g., housekeepers and maintenance workers).

- Conduct a slip-resistance test: Slip-resistance meters, called tribometers, are useful tools in gauging traction on floor surfaces. Before selecting a floor surface, use a meter to test the surface in various conditions—wet, dry, and contaminated by debris. Testing should comply with recognized standards, such as those published by the American Society for Testing Materials.
Aim for debris-free floors: Common floor debris that increases the potential for a slip and fall include water, leaves, or other material tracked in from outside as well as papers and grease. Staff should clear the debris as soon as they notice it. Tools to help reduce indoor debris include:

- “Scrape devices” near outside doors: Pedestrians use them to remove mud, snow, ice, and other potential slipping hazards from their shoes.

- Interior floor mats near entrances and exits: Mats help control water and snow accumulation if they lie flat on the floor and have a nonslip backing and beveled edges. Unsuitable mats, however, may actually increase the hazards.

Perform regular floor inspections: Routine inspections together with written records help identify problems quickly; they also show the institution’s good faith if it must defend a slip and fall claim. An inspection checklist might include:

- Condition of the floor finish: Is it time to refinish the floor? The answer may be “yes” if spills do not mop up quickly or leave stains, or the finish shows flaking, chipping, or dull or worn spots.

- Condition of stair risers, treads, and anti-slip devices: Are they loose, missing, or defective? Are screws or bolts missing? If treads are worn, adhesive-backed material with a gritty surface can be used until permanent repairs are completed.

- Control of debris: Are wet surfaces, papers, trash, leaves, or other debris evident?

- Condition of carpet: Is the carpet frayed, torn, or buckled? Is it loose? Do area rugs have nonslip backing and flat, beveled edges?

- Visibility of changes in level: Variations in levels can take people by surprise. Are these variations clearly visible? If not, would adding reflective tape or different color flooring help to improve visibility?

- Visibility of changes in floor surface: Is there sufficient lighting, reflective strips, or caution signs to highlight changes in flooring surfaces? Unexpected shifts in flooring materials, such as from carpet to wood, are common causes of falls.

- Illumination: Is the lighting sufficient to help people see where they’re walking and highlight any changes in the floor surface?

- Require use of “wet floor” signs: These signs warn people about spills or any other fluids that have not been cleaned. Large signs might effectively cover the liquid completely and are usually safer and more visible.

- Record floor cleaning and finishing materials in a maintenance log: Maintenance products are available for the specific floor surface, climatic conditions, traffic patterns, durability, and slip resistance. Using the wrong products or applying them improperly can do more harm than good. Because products may react differently on the institution’s own floors than in a test lab, caution is important in evaluating slip-resistant ratings on product labels.
- Enforce risk transfer when appropriate: If contractors handle floor maintenance, institutions may transfer liability by including waivers and hold-harmless agreements in their contracts and requiring that contractors show proof of insurance that meets the institution's risk management policy guidelines. For more information on waivers, see the Resources section.

- Encourage employee and student involvement: Staff, faculty, and students are important in preventing slips and falls. Make it easy for them to report problems and encourage them to remove debris when it can be done easily and safely.

- Implement a reporting and tracking system: An easy means for notifying the appropriate department about hazards will ensure a quick cleanup. The same system should enable follow up to be sure that all problems are addressed.

- Pay special attention to the vulnerable elderly: Elderly people tend to be especially susceptible to slipping and falling, and their injuries are often more severe than those suffered by younger people. Institutions should be aware when special events, such as commencement exercises, reunions, or cultural events open to the public, may result in a high concentration of elderly visitors on campus. Consider whether additional safety measures, such as improved lighting or larger, more readily visible signage, may be advisable.

### When All Else Fails, Investigate

When a slip or fall occurs, an institution should first obtain appropriate medical care for injured parties—or document their refusal of attention—and then promptly investigate the incident. The investigation should be conducted when injured people and witnesses are readily available and the facts are fresh in their minds. Investigators should be trained to stick to fact collection and to avoid speculating about the cause of the accident or how the institution or its insurance carrier may resolve any claims.

Institutions should require investigators to produce written reports and to submit them as promptly as possible to appropriate campus authorities, who should in turn timely submit claims or incident reports to United Educators. Reports on investigations of indoor slip-and-fall accidents should, at a minimum, cover:

- The date, time, and precise location of the accident
- Identification of and statements from all injured parties and witnesses
- A description of any reported or observed injuries
- A description of the floor surface, including the presence of carpets, mats, or other coverings, and any apparent defects
- Documentation of any liquids, debris, or foreign objects on the floor
- A description of the lighting conditions and visibility
- A description of each injured party's footwear and of any items the person was carrying
For more detailed guidance on how to conduct an accident investigation and what to include in the report, see *Checklist for Investigating Accidents Causing Personal Injury*.

A common pitfall for institutions is failing to train employees on the procedures to follow when they witness any accident, including a slip and fall. Formal procedures are a valuable tool to guide staff through the important steps, including whom to notify so that personnel trained in accident response can provide timely help. Institutions might consider developing a report template to assist responders in documenting accidents and collection of all necessary information.

If the investigator has reason to suspect fraud by an alleged victim of a slip-and-fall accident, the investigator should generally “red flag” the report when submitting it, but not put the suspicion in writing. These claims need to be handled aggressively yet discreetly.

Finally, while following proper accident investigation and claims reporting protocols is important, institutions also should not lose sight of the people involved in the accident. An institution should continue to monitor the medical treatment and recuperation of injured parties; in addition, direct follow-up to express concern for their well-being can go a long way toward smoothing relations between the institution and those injured slipping and falling inside a campus facility.
Resources

Checklist for Investigating Accidents Causing Personal Injury
EduRisk

Improving Contracting on Campus: Allocating Risks Between Parties
EduRisk

Slip, Trip, and Fall Prevention
Stanford University

Slip, Trip, and Fall Prevention
Carnegie Mellon University

National Floor Safety Institute (NFSI)

What Building Managers Can Do to Reduce the Chances of a Slip and Fall Accident and Lawsuit
Coastwide Laboratories

Acknowledgment

This checklist was written by Joe Vossen, JD, risk management counsel for UE.